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HOW TO BUY

CANNED AND FROZEN VEGETABLES



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HOW TO BUY

CANNED AND FROZEN VEGETABLES



Introduction

Canned and frozen vegetables provide the vitamins, minerals, and food energy we need as part of our daily diets.

These easy-to-prepare foods are not only a convenience, they are a necessity, especially when fresh vegetables are out of season.

All canned and frozen vegetables are wholesome and nutritious, but they can differ in quality—the difference in quality means a difference in taste, texture, and appearance of the vegetable, and its price, too.

If you've been selecting canned or frozen vegetables by habit, or can't tell which can or package would be best for the use you have in mind, here's some information that can help you make a wise choice.

Check the Quality

The Food Safety and Quality Service of the U.S. Department of Agriculture has established grades of quality for many canned and frozen vegetables. The U.S. grade standards are used extensively by processors, buyers, and others in wholesale trading, as a basis for establishing the

value of a product. If a vegetable is packed in an approved plant and inspected for quality by USDA, the labels may carry the U.S. grade name:

U.S. Grade A Grade A vegetables are carefully selected for color, tenderness, and freedom from blemishes. They are the most tender, succulent, and flavorful vegetables produced.

U.S. Grade B Grade B vegetables are of excellent quality but not quite so well selected for color and tenderness as Grade A. They are usually slightly more mature and therefore have a slightly different taste than the more succulent vegetables in Grade A.

U.S. Grade C Grade C vegetables are not so uniform in color and flavor as vegetables in the higher grades and they are usually more mature. They are a thrifty buy when appearance is not too important—for instance, if you are using the vegetables as an ingredient in soup or souffle.

The grade names and statement, "Packed under continuous inspection of the U.S. Department of Agriculture," may also appear within shields if a product has been packed under USDA continuous inspection. Under the continuous inspection program, processed vegetables are inspected by highly trained specialists during all phases of preparation, processing, and packaging.

Use of the U.S. grade standards and inspection service is voluntary, and paid for by the user.



But most canned and frozen vegetables are packed and priced according to their quality even though a grade is not shown on the label. Sometimes the grade name is indicated without the “U.S.” in front of it—for example, “Grade A.” A canned or frozen vegetable with this designation must measure up to the quality stated, even though it has not been officially inspected for grade.

The brand name of a frozen or canned vegetable may also be an indication of quality. Producers of nationally advertised products spend considerable effort to maintain the same quality year after year. Unadvertised brands may also offer an assurance of quality, often at a slightly lower price. And many stores, particularly chain-stores, carry two or more qualities under their own name labels (private labels).

What's on the Label

Fair packaging and labeling regulations should enable you to take a quick look at the label on a can or package of vegetables and see just what you are getting. They should also make it easier for you to compare prices. The regulations require that the following information be given on the label of the can or package as it faces the customer:

- The common or usual name of the product and its form or style. The style—for example, whole, sliced, or diced—may be illustrated rather than printed on the label.
- The net contents in total ounces, as well as pounds and ounces, if the can or package contains 1 pound or more, or less than 4 pounds.

Labels may also give the grade, variety, size, and maturity of the vegetable; seasonings; the number of servings; cooking directions; and nutritional information. If the number of servings is given, the law requires that the size of the serving must be stated in common measures—

ounces or cups—so the buyer will know just how much this serving is.

You may also find the USDA grade name or shield on cans or packages of vegetables. This means that the vegetables have been packed in an approved plant and inspected for quality by USDA.



Sizes and Servings






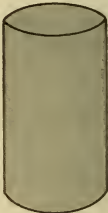
One-half cup is the serving size commonly used for adults for most cooked vegetables. Small children and light eaters are often satisfied with smaller portions—one-fourth or one-third cup.

Deciding which size can or package you should buy is sometimes difficult, because canned and frozen vegetables are packed by net weight rather than volume. Also, the number of cups obtained from a particular size of container varies for different vegetables.

The chart on the next page shows the approximate amount of cooked vegetable obtained from average container sizes of frozen and canned vegetables. This chart should help you tell how many cans or packages you need, or if you should buy smaller or larger sizes.

Vegetable	Approximate amount of cooked vegetable obtained from:			
	Cans		Frozen packages	
	Size of container	Cups	Size of container	Cups
Asparagus, cut...	14 oz.	1 $\frac{1}{3}$	10 oz.	1 $\frac{1}{4}$
Beans, green or wax, cut.....	15 $\frac{1}{2}$ oz.	1 $\frac{3}{4}$	9 oz.	1 $\frac{2}{3}$
Beans, lima	16 oz.	1 $\frac{3}{4}$	10 oz.	1 $\frac{2}{3}$
Beets, sliced, diced or whole	16 oz.	1 $\frac{3}{4}$	—	—
Broccoli, cut	—	—	10 oz.	1 $\frac{1}{2}$
Carrots, diced or sliced	16 oz.	1 $\frac{3}{4}$	10 oz.	1 $\frac{2}{3}$
Cauliflower.....	—	—	10 oz.	1 $\frac{1}{2}$
Corn, whole kernel ..	16 oz.	1 $\frac{2}{3}$	10 oz.	1 $\frac{1}{2}$
Kale	15 oz.	1 $\frac{1}{3}$	10 oz.	1 $\frac{1}{8}$
Okra	15 $\frac{1}{2}$ oz.	1 $\frac{3}{4}$	10 oz.	1 $\frac{1}{4}$
Peas	16 oz.	1 $\frac{3}{4}$	10 oz.	1 $\frac{2}{3}$
Potatoes, french fried.....	—	—	9 oz.	1 $\frac{2}{3}$
Spinach	15 oz.	1 $\frac{1}{3}$	10 oz.	1 $\frac{1}{4}$
Summer squash, sliced.....	—	—	10 oz.	1 $\frac{1}{3}$
Tomatoes.....	16 oz.	1 $\frac{7}{8}$	—	—

The most common container sizes for canned vegetables are given below, along with the industry terms used for these sizes. Industry terms for containers of canned vegetables are sometimes given in recipes.

Net weight	Industry term	
8 oz.	8 oz. _____	
10½ to 12 oz.	No. 1 or Picnic _____	
16 to 17 oz.	No. 303 _____	
20 oz. (1 lb. 4 oz.)	No. 2 _____	
29 oz. (1 lb. 13 oz.)	No. 2½ _____	
46 oz. (2 lb. 14 oz.)	No. 3 Special —	

Common package sizes for frozen vegetables are 8, 9, 10, 12, 16, 24, and 32 ounces. Some frozen vegetables are also packaged in large plastic bags. You may find it more economical to buy the large plastic bag, because you can use part of the contents for one meal and put the rest back in your freezer to serve later.

Commercial Processing

Vegetables for canning and freezing are grown especially for that purpose, and the processing preserves their nutritional value. Both canning and freezing plants are usually located in the vegetable production areas, so the harvested vegetables can be quickly brought to the plant for processing while fresh.

In today's modern plants, most of the processing is done by automated equipment and there is little handling of the vegetables by the plant workers. These high-speed processes bring us sanitary, wholesome products, preserved at the peak of their goodness and flavor.

Styles, Seasonings, and Sauces

Both canned and frozen vegetables are sold in many forms or styles. Beets, green beans, potatoes, and other vegetables may be found whole, cut, sliced, diced, and in other forms.

Whole vegetables generally cost more than cut styles because they are specially selected for appearance and uniformity of size, shape, and color. Whole vegetables make attractive servings, either hot or cold.

Short-cut green beans, diced carrots, and tomato pieces are examples of the least expensive styles of processed vegetables, and the styles that are best used in soups, souffles, and stews.

Fancy-cut vegetables, such as French-style green beans or julienne carrots (both French-style and julienne are sliced lengthwise), because they are more attractive, are best used to dress up a dinner plate or cold salad.

Many frozen vegetables are available in butter or cream sauces, with mushrooms, or other garnishes or flavorings. Some canned vegetables are also available in butter sauces or with other garnishes, such as tomatoes with green peppers and onions. Such vegetables, of course, cost more than the plain product, but let you serve something different without any extra work.

Tips on Containers

When you buy canned vegetables, be sure the cans are not leaking or swelled or bulged at either end. Bulging or swelling indicates spoilage. It may be dangerous even to taste the contents. Small dents in cans do not harm the contents. Badly dented cans, however, should be avoided.

Packages of frozen vegetables should be firm. Because frozen vegetables should be used immediately after they have been defrosted—to avoid loss of quality, don't buy packages that are limp, wet, or sweating. These are signs that the vegetables have defrosted or are in the process of defrosting. Packages stained by the contents or with ice on the outside may have been defrosted and refrozen at some stage in the marketing process. The contents may be safe to eat, but refrozen vegetables will not normally taste as good as the freshly frozen vegetables.

Vegetables sold in glass jars with screw-on or vacuum-sealed lids are sealed tightly to preserve the contents. If there is any indication the lid has been tampered with, return the jar to the store and report the matter to the store manager.

A Consumer's Guide to Buying Canned and Frozen Vegetables

The grade and style of a vegetable, whether or not special seasonings or sauces are added—all affect the cost of the processed product and also determine the best way to serve the vegetable, so you get the most for your money and the most out of the vegetable.

Selecting the style, seasonings, and sauces is easy enough, because these are shown on the label. The grade or quality often is not indicated, but you can learn to tell differences in quality by trying different processors' or distributors' products.

To help you check the quality of canned and frozen vegetables you buy, the grades of some of the more popular vegetables are described in the list that follows, along with the styles of the vegetables.

Remember:

Grade A vegetables are probably the most expensive vegetables. But they are the most tender and flavorful and make the most attractive servings for a special luncheon or dinner, either hot or in a cold salad.

Grade B vegetables are less expensive. They are good served hot or in casseroles or gelatin salads.

Grade C vegetables are usually the least expensive vegetables. They are a good buy for use in soups, purees, souffles, or stews.

All three grades of vegetables, in any style, are wholesome and nutritious. And tastes differ—most people like tender (Grade A) vegetables best, but some like more mature vegetables (Grades B or C).

Artichokes

Artichoke hearts—the tender inner part of the vegetable—are available frozen and canned. Artichoke hearts are also packed in vinegar and sauces, to be used like pickles or hors d'oeuvres. Canned whole artichokes are also available, and they may be served like the fresh vegetable. The repeated handpicking necessary to harvest artichokes makes it a relatively expensive vegetable.

Asparagus

Asparagus is more expensive than other vegetables because much of the harvesting and preparation during processing is done by hand. The spear or stalk consists of the stem and head (tip). There are two types of asparagus—green and white. Green asparagus is canned or frozen; white asparagus is canned. White asparagus is a delicacy, produced by mounding earth around the plant so that the stalk develops entirely underground. Sometimes canned asparagus is packed in glass jars, with a note on the label that color preservative (stannous chloride) has been added. Some canned asparagus spears may have shattered heads because asparagus is such a delicate product.

CANNED TOMATOES

Typical Samples

**U.S.
GRADE
A**



**U.S.
GRADE
B**



**U.S.
GRADE
C**



In the higher grades, the color is redder and more of the tomato portions are in whole or large pieces.

FROZEN GREEN BEANS

Typical Samples

**U.S.
GRADE
A**



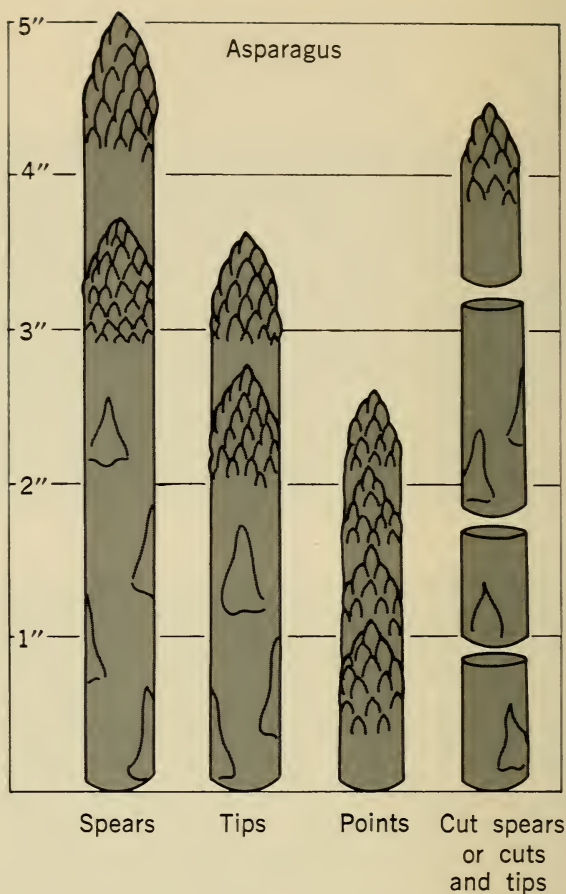
**U.S.
GRADE
B**



**U.S.
GRADE
C**



As the quality increases, the pods are smaller and less mature, the color is more uniform, and defects are fewer.



Beans, baked, kidney, and others

Many varieties of mature dry beans are processed by canning. Baked beans are processed in tomato sauce, or brown sugar and molasses, usually with pork, and cooked in ovens. Small white beans and lima beans are also available in tomato sauce, sometimes with a small amount of pork or meat flavoring. Red or kidney beans are prepared in a sweetened sauce or clear salt brine.

Top-quality mature dry beans have a smooth sauce and few broken or mashed beans are found in a can. Because of the unusually high protein content and food energy of these vegetables, they may be used as main dishes as well as side dishes or ingredients in salads.

Beans, green and wax

Called string beans before the development of stringless varieties, or snap beans, pole beans, or bush beans when they are fresh, the canned and frozen products are usually known as green beans and wax beans. Wax beans are so called because of their waxy yellow color. There is little difference in nutritional value of the two types of beans, but green beans are better known. "Blue Lake," a popular variety of green beans used for both canning and freezing, is often named on the can or package. Italian or "Romano" green beans are large flat beans.

Styles of both frozen and canned green and wax beans are: whole, French (julienne or shoestring), and cut. Whole style beans are sometimes packed vertically in cans; when the beans are of about the same length, they can be labeled "whole asparagus style." French, julienne, or shoestring beans are sliced lengthwise. Cuts or "short cuts" are sliced crosswise. Beans cut diagonally are called "kitchen cuts" or "home cuts."

Beans, lima

Several types of lima beans are canned and frozen. The Fordhook variety, a name often shown on labels, is a large, thick bean. Several varieties of lima beans have small, thin beans; these are usually called baby limas. Lima beans are white, yellow, or green, depending on their maturity when harvested. Each color has its own flavor. Green limas are usually the youngest beans.

Speckled butter beans are another variety of lima bean, found mostly in frozen form. They are larger than most other lima beans and have a different flavor. These beans range in color from green, pink, and red to lavender and purple, with brown, purple, and other speckling.

U.S. Grade A and B lima beans are less starchy than Grand C, and baby limas are less starchy than the larger beans.

Beets

Canned beets are available whole, sliced, quartered, diced, and in strips. Beets prepared in a slightly thickened, sweet vinegar sauce are called Harvard beets.

Broccoli

Frozen broccoli is prepared as whole spears or stalks, short spears or florets (the head with a short portion of the stalk), broccoli cuts or pieces, and chopped broccoli.

The highest quality frozen broccoli looks much like the fresh vegetable—it has compact bud clusters that are dark green or sage green, sometimes with a decidedly purplish cast. Second quality broccoli may have slightly spread bud clusters.

Brussels sprouts

Brussels sprouts are a member of the cabbage family and they look like miniature cabbages. They get their name from Brussels, Belgium, where they originated.

Top quality frozen Brussels sprouts have tight-fitting leaves and are free from blemishes.

Cabbage

Sauerkraut is one form of processed cabbage. The shredded cabbage is fermented in a brine of its own juice and salt, and it may be flavored with peppers, pimientos, tomatoes, and various spices. It is available canned and in refrigerated packages, and, at times, a semi-fresh product is sold from barrels or similar containers. "Sweet and sour" red cabbage is also sold.

Carrots

Canned and frozen carrots are available whole, quartered, diced, as strips and round slices (cuts), and chips (frozen only). Canned small baby carrots are especially flavorful.

Cauliflower

Frozen cauliflower is separated into florets before it is frozen. Grade A cauliflower is white to creamy-white. Grade B often looks slightly gray or brown but turns white when cooked.

Corn

Processed sweet corn is found in many forms, styles, and grades. Canned corn may be cream style—with large or small pieces of kernels in a thick, creamy sauce prepared from corn, salt, sugar, water and sometimes small amounts of starch; whole grain style, with the kernels generally whole and packed in a relatively clear liquid; and vacuum-pack whole grain, with kernels intact but little or no liquid. Most canned corn is prepared from yellow or golden-colored varieties, but some white corn also is canned. “Shoe peg” corn, a whole-grain white corn, has small, narrow kernels with a distinctive flavor.

Most frozen corn is whole-grain yellow or golden corn. A considerable amount is frozen on the cob.

Both canned and frozen corn may have peppers or pimientos or other foods added for flavor or appearance.

Much processed corn is packed according to U.S. grades, with the USDA grade mark on the label:

U.S. Grade A is tender and succulent, free from defects and has excellent flavor.

U.S. Grade B is slightly more mature and more chewy than Grade A, reasonably free from defects, and has a good flavor.

U.S. Grade C is more mature and starchier than Grades A and B but it is flavorful and nourishing.

Hominy

Hominy is prepared from the mature kernels of regular field corn. The kernels are soaked, cooked slightly, and then the hard outer covering is removed before further processing. Hominy is available in plastic bags in refrigerator cases, but it is usually canned, either in brine or as jellied hominy. It is a starchy vegetable like potatoes or sweet corn and is served hot. Jellied hominy may be sliced and fried like potato cakes.

Mixed vegetables

There are many varieties of mixed vegetables available—both canned and frozen—and most of them contain vegetables of top quality.

These blends are usually more expensive than buying the vegetables individually because they require more handling, but they are tasty and convenient to use.

Among the traditional vegetable blends are peas and carrots, succotash, and the product called “mixed vegetables.”

“Mixed vegetables” is a combination of green beans, lima beans, carrots, corn, and peas. Sometimes diced potatoes are also added to this mixture when the product is canned.

Succotash is a mixture of beans and corn. Canned succotash may contain cream-style or whole-grain corn and lima or green beans, with or without tomatoes added. Frozen succotash normally consists of white or yellow corn and lima beans. The proportion of corn and beans in both canned and frozen succotash may vary somewhat from packer to packer.

These more traditional mixed vegetable products have been joined by many new combina-

tions, especially frozen. Among the new frozen blends—which are sometimes packed with sauces—are peas and small onions; vegetables for making stew; oriental and other exotic mixtures; and vegetables, like peas and mushrooms, with rice.

Mushrooms

Mushrooms are canned in several styles: whole (including the stems), as buttons (the top only), sliced, and stems and pieces. They are sometimes processed in butter and broiled before they are canned. You may also find frozen mushrooms in some stores.

Okra

Sometimes called “gumbo,” okra is quite popular in the Southern States. It is often used to flavor and thicken gumbos or thick soups. Since okra is now available canned and frozen, its use is spreading to other regions.

Small whole okra pods and pods cut into rings are available both canned and frozen. Canned fermented okra is partially fermented in a salt brine and has an acid, kraut-like flavor. Usually firm, with a bright green color, canned fermented okra may be served as a side dish, but it is usually used in soups or other foods. Small okra pods are also available pickled.

Onions

Whole onions are available both canned and frozen and breaded onion rings are available frozen. Canned whole onions are usually packed in a salt brine. Top-grade canned and frozen onions are specially selected for variety, size, and shape so that they will keep their good appearance during processing.

Peas, black-eye and other Southern varieties

Several varieties of peas are known as black-eye or Southern peas and sometimes by other names such as "creme" and "purple hull." These immature succulent peas are both canned and frozen. Sometimes a few "snaps"—tender pieces of the pod—are included with the peas for flavor or garnish. Some canned Southern peas are prepared from mature dry peas. These peas are somewhat starchy and have a different flavor.

Peas, green

Either canned or frozen, peas are one of the most popular processed vegetables. Different varieties are grown for the two methods of processing because of the different effects of canning and freezing on flavor and color. Two types of peas are used for canning—the smooth-skinned early or early June type, and the dimple-skinned or sweet type. Most peas for freezing are of the sweet type, especially developed for deep-green color.

U.S. Grade A canned peas are tender and flavorful and their color is the typical soft pea-green. The juice is slightly green and water-like. Off-color peas are rarely found in a can.

U.S. Grade B canned peas may be slightly mealy but they have a very good flavor. Their color may be variable and a few off-color peas or broken peas may be in a can. The liquid may be a slightly cloudy, light green.

U.S. Grade C canned peas tend to be mealy, and do not taste as sweet as Grades A and B. They are a dull pea-green and some blond or cream-colored or broken peas may be in a can. The liquid may be very cloudy with a starchy flavor.

Many canned peas are sorted for size—tiny, small, medium small, medium large, large, or extra large. Sizes are often shown on the label.

“Garden run” means no size separation has been made. “Assorted sizes” means two adjacent sizes. “Mixed sizes” means three or more sizes. “Sifted” means that some sizes have been removed.

Frozen peas are not usually sized, although a limited supply of excellent quality small round or early June type peas is frozen.

Peppers

Both green and red peppers are frozen whole, with or without stems, as well as halved, sliced, and diced. Frozen peppers are convenient to use for stuffing or as garnish. Red and green peppers are sometimes available canned too.

Potatoes

Processed white potatoes are available in many forms, including canned, small whole or sliced potatoes and french-fried shoe strings, vacuum-packed and ready-to-eat. Frozen potatoes—in many sizes and shapes—are available either fried or unfried. The frozen unfried products are ready-to-cook patties and whole, sliced, diced, or shredded potatoes. Frozen french fried potatoes include the ever-popular strips, sliced or diced products, patties, and puffs. Most frozen french fries for home use are designed for finishing in the oven, though deep or shallow frying also produces good results.

Top quality frozen french fries can range in length from 2 to 3 inches—although the length of the french fries in individual packages should be fairly uniform. Top quality french fries also have a uniform color (from light to medium brown when “fried”). They are uniform in shape and have few if any defects such as dark spots and pieces of peel. Texture may vary a little from

brand to brand depending on the variety of potato used by the packer, but french fries should be tender, cooked throughout, and not soggy. Traditional french fries are moderately crisp on the surface while shoestrings and dices may be quite crisp throughout.

Spinach and other greens

Various leafy greens are available in canned or frozen form. Among them are: spinach, collards, kale, mustard, turnips (with or without immature roots), poke salad, endive, and Swiss chard. Spinach is processed in "whole leaf," cut leaf, and chopped styles, sometimes with various sauces and flavorings. The highest grade of these products is produced from young, tender plants.

Squash

Canned and frozen summer squash is prepared from small succulent squashes usually cut crosswise. Several varieties are available, including the flavorful zucchini.

Canned and frozen winter squashes, very similar to pumpkin, are usually cooked and ready for use as a vegetable or in a pie filling.

Sweetpotatoes

Processed sweetpotatoes come in many forms. Canned sweetpotatoes may be vacuum-packed (without any liquid), in a sirup with or without garnishes like mandarin oranges and pineapple, or solid pack (tightly packed with little liquid). They are canned whole, halved, mashed, or as pieces. Frozen sweetpotatoes are available whole or halved, baked, stuffed in a shell, sliced, french cut, diced, mashed, and sometimes formed into cakes.



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Tomatoes

Canned tomatoes are usually peeled and packed in their own juice but they may have some added tomato pulp or semi-solid paste. The higher grades have a better color, usually more whole than broken pieces, and are practically free from peel, core, and other defects.

Many canned tomato specialties are also available. They include pear- or plum-shaped tomatoes and slices, dices, and wedges which are firm and have little juice. Many of these can be used in salads. Other specialties are: stewed tomatoes, which contain onion, pepper and other flavorful ingredients; tomatoes and okra; tomatoes and hot peppers; and crushed tomatoes.





HOW TO AND FROZEN VEGETABLES

LOOK FOR
THE GRADE



U.S. Grade A Tops in tenderness, flavor, appearance, uniformity. The most attractive servings for special luncheon or dinner.

U.S. Grades B & C Acceptable quality for table use, cooking, casseroles.

CONSIDER THE STYLE Buy the style that fits your needs and pocketbook. Dices, short cuts, and vegetables pieces cost less than whole or specially sized vegetables.

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